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(54) **MOTION AND GESTURE INPUT FROM A WEARABLE DEVICE**

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(57) **ABSTRACT**

This relates to a device that detects a user's motion and gesture input through the movement of one or more of the user's hand, arm, wrist, and fingers, for example, to provide commands to the device or to other devices. The device can be attached to, resting on, or touching the user's wrist, ankle or other body part. One or more optical sensors, inertial sensors, mechanical contact sensors, and myoelectric sensors can detect movements of the user's body. Based on the detected movements, a user gesture can be determined. The device can interpret the gesture as an input command, and the device can perform an operation based on the input command. By detecting movements of the user's body and associating the movements with input commands, the device can receive user input commands through another means in addition to, or instead of, voice and touch input, for example.